

WHAT IRON AGE GARDEN DRILLS AND WHEEL HOES MEAN

To the Market Gardener

You can plant in rows as close as the crop will stand and grow right.

You can plant every seed just where you want it—regular planting makes easy cultivation, little or no hand weeding, and every valuable seed counts.

You can cultivate more thoroughly and more carefully than is possible with a horse. This is especially true in young plants.

You can put in crops between rows that have been farmed with a horse, and cultivate with Wheel Hoes until the first crop is harvested.

You can produce more and better crops from an acre of ground.

To the Home Gardener

You can change entirely from the drudgery of hand work, lame backs, stiff joints and sore fingers, to healthful exercise in an upright position, and a realizing sense of a better garden in every way, with far less work.

You can adjust the tools to do practically all of your garden work.

Your wife or your children can operate these tools easily.

To the Men and Women

who have wanted gardens but have not cared to make slaves of themselves, these tools mean real pleasure, vigorous health, all of the best things to eat for themselves and their friends, and less provision expense.

To the General Farmer

The solution of your garden problem—you can set a better table for your men at less expense and far less work for your wife—you can rest your horses and do a little hand work easily — you will have a handy tool for occasional field work.



SUCCESSION PLANTING IN A THRIFTY HOME GARDEN

To the Seed Grower, Sugar Beet Man and Nurseryman

The same rules apply as with the market gardener—more business with less expense.

To the Mechanic and Laboring Man

Independence from the butcher and the grocer—it is your best way to fight the middleman who gets twice to ten times too much for his slight service in handing to you wilted vegetables. (See pages 10-12.)

To the Poultryman

Another way to keep your chicks healthy, with but little work. (See page 12.)

To the Onion Grower

Absolutely straight narrow rows of seeding that require little hand weeding. (See pages 5 and 10.)

Please note the many advantages in diameter and construction of wheels,

light steel frames, adjustments of handles, wheels, and working tools, the great variety of attachments, the large line and the many combinations in which each tool can be purchased. See fertilizer tools and attachments on pages 15-16.

See, also, Barrel Trucks, Carts, Leaf Racks, Small Garden Tools, Horticultural Index, etc., on pages 18-20.



CULTIVATING LATE CROP OF BUSH BEANS, PLANTED BETWEEN THE ONIONS, WHICH ARE ABOUT READY TO COME OUT. THEN THE HORSE HOE WILL BE USED.

Let your dealer know what you need and see if he cannot fit you out in a hurry.

BATEMAN M'F'G CO..

GRENLOCH, NEW JERSEY,

U. S. A.

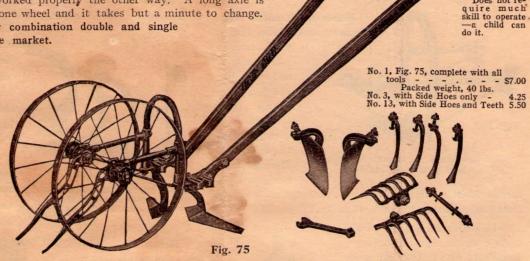
IRON AGE No. 1 Double and Single Wheel Hoe

The many things that can be done with this tool are shown on this pageeight distinct operations, simply by adjusting tools on the frame and changing

From double to single wheel form. The double wheel hoe is for working astride the plants when they are young—the single wheel for working between the rows, after the plants have grown too high to be worked properly the other way. A long axle is furnished for the one wheel and it takes but a minute to change. This is the only combination double and single wheel hoe on the market.

The operator walks in upright position. This point counts with your customers who have been using ordinary hoes-no man wants to bend his good back unless he has to and this one thing has prevented the making of many gardens.

Turn to pages 4, 6, 7, where other forms of this tool are shown, for seeding and special cultivating, and to pages 3 and 16 for attachments, including those for fertilizer.



Includes all tools shown above. A complete outfit for any gardener



Fig. 311
With plow set for hilling



Fig. 312 Cultivator teeth can be set to suit the width of rows

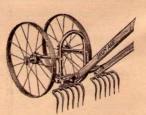


Fig. 310
With rakes to go astride the row



Fig. 76
With side hoes set to cut close between the rows



Fig. 313
Plows set to open a furrow

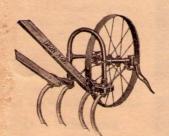


Fig. 315
For cultivation between rows

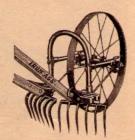
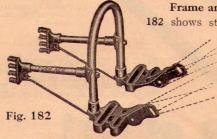


Fig. 314
Set for weeding between rows

IRON AGE No. 1 Single and Double Wheel Hoes-Continued

In construction, we get three results—a light weight tool that anyone can push—a strong tool that will last a generation—a convenient tool that can be changed to a single wheel hoe, adjusted to any condition and takes many attachments to do special work.



Steel tube frame. Adjustments for wheels, working tools and handles

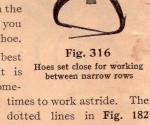
Frame and handles. Fig. 182 shows steel tube frame

with malleable fittings and steel braces—regular bicycle construction strong, compact, light. The high arch permits work

astride 20-inch plants. We have used this style frame from 1895, when we began to make No. 1.

as for a bicycle, light but strong—being high wheels, they run easy, ride holes or furrows without sticking and carry the frame well above the work. Wheels can be set at three different heights in the frame or placed inside the frame for narrow rows. With the long axle shown with Fig. 75, you can change to single wheel hoe.

Single wheel hoes are best in most garden work, but it is necessary and desirable some-





Short side hoes set for close work in spinach

dotted lines in Fig. 182 show adjustment for handles to suit the small boy or tall man. Handles are made of ash.

Vine lifters keep the plants from being coveredwith soil. We furnish two.

Side hoes can be set close to the plants as the wheel runs steadily. For first hoeings of small plants, set as in Fig. 75, to work astride or between the rows (Fig. 76). One hoe hangs slightly ahead of the other, trash can get through and hoes can overlap when reversed—can hoe in 9-inch space. Hoes can be furnished to hang opposite, if wanted. Regular hoes are 7-inch, but we make them 4 to 12 inches.



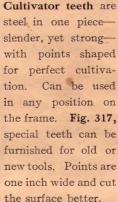
Special narrow shank cultivator teeth.

Price, per set of four, \$0.80.

Does not include bolts

Plows are used 'astride the rows or between, for hilling or taking soil from the plants. With both plows in the center, you can open a good furrow—by reversing, can cover after manure and seed.

Rakes level and pulverize the soil for the seed bed also break the first crust, destroying the weeds. Can be set at any angle.





Ridging onions after heavy rain



Perfect cultivation and no danger to the plants

Attachments for IRON AGE Wheel Hoes



Fig. 169

Solid part shows disc and fender close to small plants on attachment. Arrows indicate adjustments. Price, attachment only,

account of the crust that forms around them-the small discs on this attachment are set to cut the surface ahead of the hoes. Discs may be used as fenders (usually with cultivator teeth) to keep soil from being thrown on the plants. Arrows in the cut indicate three different adjustments-depth of cutting,

All on this page for No. 1, Double or Single Wheel Hoe. These attachments increase the variety of work that can be done and save much time. They also save buying complete tools for special work.

Combined Disc and Fender Attachment. Fig. 169

You cannot safely hoe



Fig. 82

Landside plow.

Price, \$0.90

distance from the plants and position forward or back.

Garden Disc Cultivating Attachment, Fig. 369

See page 7 for description. Furnished as attachment for wheel hoes, Nos. 1. 9 and 20,

Landside Plow, Fig. 82

Makes the tool a perfect wheel plow, with plow following line of the wheel. Plows good, deep furrow and runs steadily.

Double Moldboard Plow, Fig. 170

Has adjustable wings to open furrows of various widths. For narrow work the wings can be removed. Can be applied to any Iron Age Wheel Hoe.

Special Fender Side Hoes, Fig. 216

Made with high sides, for early working, especially in onions. Used in place of



Fig. 170. Shows plow and clip which makes the attachment. Price, \$1.40

the regular hoes on any Iron Age Wheel Hoe-will be furnished that way when ordered -add letter "C" to the number of the tool, as No. 1C, and 65 cents to the price. Cut shows them for working astride-can be reversed for work between



Fig. 216 Special fender side hoes. Price, \$1.40



Fig. 236. Price, \$1.25

Hilling Attachment, Fig. 236

For Double Wheel Hoes. These hillers draw a small amount of soil to the plants working astride the row. Are used principally in early cultivation of onions.

Double Weeder Attachment, Fig. 81

For destroying the weeds in hard crust which the side hoes might not get alone. Cut shows position in which weeder is attached. It throws back to the plants the little soil taken away by the hoes and leaves the ground with a level mulch of fine soil that protects in dry time. One or more teeth can be taken off. Attachment can be used on single wheel hoe by changing to opposite

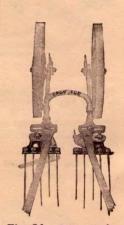


Fig. 81. Price, attachment only, \$1.10



Fig. 112. Price, \$0.60

Single Tooth Attachment, Fig. 112

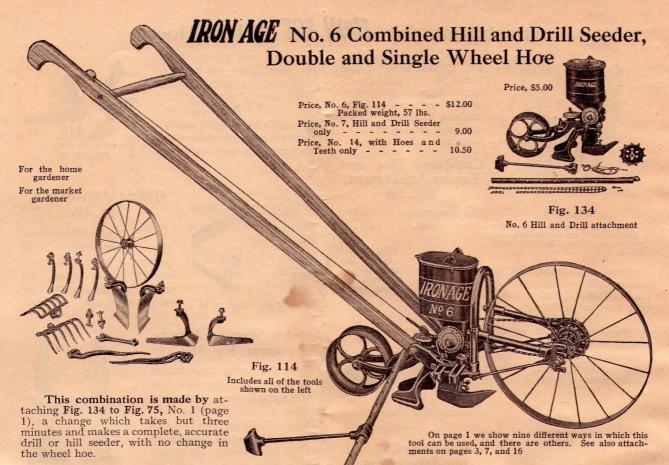
To be used with single wheel form of No. 1 Hoe, to cultivate the ground between the two inside teeth when working between rows.

Onion Set Gatherer, Fig. 33

Saves hours of hard work, Gathers onions, radishes and other root crops in a thorough manner. Can be used on any of our double and single wheel hoes.



Fig. 33 Price, \$0.80



Gives you twice the value and is the best tool to buy if you have enough work for a seeder.

What it will do. It will open its own furrow, sow in continuous rows or drop in hills, cover the seed with loose soil, pack it with roller and mark the next row. Then when the time comes the drill attachment is taken off and the different cultivating tools can be used as needed.

Kinds of seeds. Vegetable—asparagus, beets, cabbage, carrot, cauliflower, celery, chicory, cucumber, endive, kale, leeks, lettuce, mangold, okra, onions, parsley, parsnips, peas, pepper, radish, rice, sage, salsify, savory, spinach, tomato, turnip, etc. Fruit seeds—apple, cantaloupe, melon, pear, etc. Also, tobacco and flower seeds.

Capacity. The hopper holds two quarts and the seeder distributes uniformly whether the hopper is full or only partly so.

Market gardeners, nurserymen, etc., will scarcely want to get along without a tool of this kind as it is adapted to such a large variety of their work.

Sugar beet and chicory growers can sow these seeds with the No. 6, accurately and without injury. The arch being high allows cultivation of these crops until well grown.

As a hill seeder, it will drop in hills at 4, 6, 8, 12, or 24 inches apart and, when ordered, the seeder will be equipped with special sprocket wheel, C-121-A, which will drop the seed 5, 8, 11, 16 or 32 inches apart.

The change from hill to drill seeder is made instantly by throwing upper lever shown in Fig. 318, into notch in lower lever. This cut also shows the

Hill spacing plate and its connections. The pins, placed in holes at outer edge of plate, space the various distances under 24 inches. The arrow indicates stationary peg on back of the plate, that makes the hills 24 inches apart.



Fig. 318
White spots indicate heads of pins.
Arrow points to stationary pin

Fig. 146
Brush agitator, hill dropping device, index and opening plow

76 YEARS IN BUSINESS

IRON AGE No. 6 Combined—Continued



Fig. 319 Arrows show seed opening and swinging cut-off

index a trifle backward or forward.

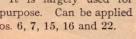
Amount to be sown. This is regulated by a seed slide and index adjustment for various seeds (Fig. 146). Every man

has his own ideas on this point and with this index he can suit himself. When the indicator is set, that should be taken as a starting point from which to regulate the flow of seed exactly, by moving

Fig. 215 Price, \$1.00

the seed in a straight, narrow row which makes it possible to cultivate very close. The plow is adjusted in depth by thumb screw in front.

> For sowing onion seed, for sets, in a row over three inches wide, we recommend the use of opening plow, Fig. 145. It is largely used for this purpose. Can be applied on Nos. 6, 7, 15, 16 and 22.



For drilling seed in very

narrow rows, opening plow, Fig. 215, may be used. It is especially valuable for market onions other

> than sets because the wheel hoe can be worked close



Sows in narrow rows with Fig. 215 plow. Hand weeding is need-

enough to do all the necessary weeding. It cannot be used for dropping in hills. When complete machines are ordered with this plow, it should be with Nos. 4, 5, 17, 18, only-add letter "B" to the number, as No. 4B. As an attachment, it will also fit Nos. 6, 7, 15, 16 and 22 drills. Price includes the spout.

Fig. 360 shows a new plow that can be applied to either No. 6 or No. 15. On account of its shape, it pulls into the ground easily, but is recommended for clean soil only.

Coverers close the furrow after the seed is dropped. They are flexible to prevent clogging with trash or lumps.

A force feed. Some round, smooth seeds flow through the discharge opening naturally, but others, such as beets, tomatoes, etc., cling together and need an agitator to insure continuous feed. Ours is a

Brush agitator, made of selected bristles that do not injure the seed in any way-they wear a long time and are cheaply replaced—they feed all of the seed that the opening in the slide will take care of.

A swing cut-off permits the operator to stop the flow of seed instantly by means of a cord and ring on the handle -this prevents loss at ends of rows. Fig. 319 shows bottom side of the cut-off-it cannot be jammed by falling seed

as can the cut-offs that slide under. Fig. 183 Seed sowing in full view. You see the seed drop

Fig. 183 shows how there can be no mistake about the seed being deposited in the soil, for the man at the

handles can see every seed as it drops into the spout. Your customer will not have spaces without seed, which he doesn't know about.

Steel Locke Belt chains are furnished on all Iron Age drills, and adjustable Fig. 145 cam tighteners not only Price, \$0.50 keep the tension right but help in attaching or removing the chain.

The opening plow (Fig. 146) not only opens the furrow but crushes and separates all trash in the way and keeps



Rear view showing roller that packs the soil and marking the next row

The next row can be marked at from 6 to 20 inches wide, either side of the tool. Takes but a second to adjust-the stick pivots at rear of the hopper and can be thrown by the foot.



Fig. 360 Price, \$0.50

Attachments. Other than the plows above mentioned, all attachments on page 3, also Figs. 184 and 235, page 16, can be applied to this tool.

IRON AGE No. 33 Two Row Hill and

For use in truck gardens where much of the seed is ex-

right, do it yourself. With No. 33 a man can put in the two rows himself-this is the strongest argument in favor of the tool.

Drill Seeder

Made up of two No. 6 Hill and Drill attachments, except that one is made left hand and both have some slight changes so they can be connected up

The drill sections are entirely flexible—they pivot on steel pipe axle, are carried on steel pipe frames and 16 inch steel wheels in front, and are guided and pushed with a strong, single handle with steel frame braces to the axle. This

Allows for unevenness of ground and gives regular and uniform sowing from each section at all times.

The weight. The purchaser must not expect a light weight tool-there are two drill attachments and the necessary frame connections-60 pounds net.

8 to 20 inch rows can be sown, adjustments on the axle every two inches, each side separately, by set screw. Reversible steel and cast iron marker. Handle adjustable for height.

pensive and naturally the gardener wants to be sure that all of it counts, and is put in where and as he wants it. Most men would not ob-Fig. 389 ject to paying Packed weight, 156 lbs. another man to run an extra drill, if he could be Price, \$20.00 sure that the work would be well done, but "Poor Richard" has said that if you want a thing done

No. 4 Combined Drill Seeder and Double and Single Wheel Hoe

Fig. 133

No. 4 Drill

attachment, Price, \$4.00

spout—if so, add letter "B" to the

number, as

No. 4B.

properly.

A drill seeder, like No. 6 except that it does not have hill dropping device and has a different opening plow. Fig. 133 is the No. 4 drill attachment which, added to No. 1 Wheel Hoe, makes No. 4 Combined. Sows in continuous rows only.

For the man who makes a specialty of one or more crops that are always sown in continuous rows and, naturally, has no use for the hill

dropping parts.

Onion growers will easily realize what our regular steel reversible opening plow (Fig. 320) means in their business it permits them to make nar-

Regular open- row furrows for market onions other than sets and keep the seed where it can be more thoroughly cultivated by machine. Is adjustable for depth also.

Fig. 234 represents a plow similar to the regular

opening plow on Nos. 6, 7, 15, 16 and 22 drills. It is known to our customers as an

Fig. 320

reversed

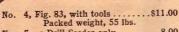


Fig. 234 Price, \$0.50



anti-clog plow because it cuts through trash, etc. If drill is wanted with Fig. 234 in place of regular steel plow, order by adding letter "D" to the number, as No. 4D.

Fig. 215, on page 5, can be furnished for No. 4, either as an attachment or on complete tool in place of regular plow and



No. 5, as Drill Seeder only 8.00 No. 40, with side hoes and teeth only. 9.50



IRON AGE No. 27 Double and Single Wheel Garden Disc Cultivator

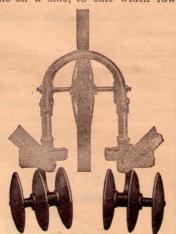
No. 27, Fig. 364, \$7.5

Packed weight, 41 lbs.

Fig. 364

In light, dry soils this combination makes the soil fine and loose and market gardeners will find it to their advantage to have at least one outfit like this. If they already have No. 1, No. 9 or No. 20, it will pay to have attachment (Fig. 369, page 3) to make one of the combinations named on this page. The discs are not suited to wet or trashy ground.

Throws soil to or from the row. The discs can be set either way and used astride or between rows. Can be used three, two, or one on a side, to suit width rows.



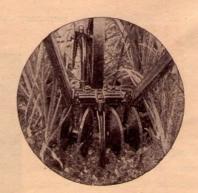
Showing discs arranged for inthrow

3½ inch adjustment in the frame slots, each side—disc gangs can be set any reasonable distance apart or close together. The discs can be adjusted for angle by turning the standards in the frame, and for depth by raising or lowering wheel in frame.



Two discs on each side in narrow rows of seed onions

When set to throw in and meant to work close, the standards and thimbles are changed—easily and quickly done. The discs are heavy steel, properly ground, and will wear a long time.



For perfect cultivation

No. 27, Fig. 364, is same as No. 1 Double and Single Wheel Hoe, except it has discs in place of side hoes and rakes.

Above we show a single cultivator tooth, used between the disc gangs to get more thorough cultivation from row to row.



This is a practical garden tool—so it follows that it must be light or people would not use it, yet strong and durable to make its use pay. Next,

It will do all of the necessary between-the-row hoe-

ing, cultivating, furrowing, ridging, weeding, leveling, etc., in any home or market garden.

Market gardeners use many different tools for cultivation because they have enough work of each kind to make it desirable to have separate tools so they won't have to change. So, single wheel tools answer for certain work better than double wheel styles.

The working tools include a pair each of side hoes and rakes, three steel cultivator teeth, and a landside plow. These are all adjustable for position on a one-piece malleable frame, for close or wide cultivation.

care to spend more on separate tools.

You can begin with the wheel hoe and add the other parts as you find they are needed.

Other attachments, Figs. 33, 112, 170, 216, 236, and

369, on page 3, and the two fertilizer attachments, on page 16, can be applied to this tool. No. 28, listed on preceding page, is the disc cultivator form of No. 20. Also,

Single Weeder

Attachment, Fig. 84

Fig.

Single

weeder

attachment



Ridging Celery

Pulverizes the soil and

just appearing. One or more teeth can be removed to permit working in narrow spaces.

destroys the small weeds

IRON AGE No. 15 Combined Hill and Drill Seeder and Single Wheel Hoe

No. 20 plus Fig. 134 makes the above combination and gives the man who prefers or needs single wheel hoe only, the same equipment and service as with our No. 6 Combined, except the double Wheel Hoe and the higher frame.

The hill and drill seeder attachment (Fig. 134) is instantly. exactly the same as on No. 6-sows all Figs. 145 and 215, No. 15, Fig. 125, \$11.00 Packed weight, 45 lbs. No. 16, Fig. 125, less tools, \$8.50

of the seeds named on page 4, either in continuous rows or drops in hills 4, 6, 8, 12, or 24 inches apart, the change from hill seeder to drill. or vice versa, being made

Fig. 134 No. 6 Hill and Drill attachment Price, \$5.00

on page 5, will fit this tool as attachments, but Fig. 215 should not be ordered with No. 15 as a new tool because it will not work when dropping in hills. Order Nos. 17B

> or 18B, if you prefer Fig. 215 on your new machine.

> If you want hill and drill seeder only, order No. 16, which is Fig. 125 less the working tools.

> Attachments. Figs. 33, 112, 170, 216 and 369, on page 3, and Fig. 84, page 8, can be applied to No. 15. Also, Nos. 25 and 26, fertilizer attachments, page 16.

No. 17 Combined Drill Seeder and Single Wheel Hoe



No. 20 plus Fig. 133 makes this combination. It is the same as No. 15 Combined except that it will not drop seed in hills, and the opening plow is

> The drill attachment, Fig. 133, is exactly the same as on No. 4 Combined and the complete No. 17 gives same service as No. 4 except that the latter has

double wheels and a higher frame.

The opening plow is same as on No. 4 (Fig. 320, page 6), is reversible for narrow furrows when planting market onions other than sets, and is adjustable for depth.

Figs. 215 and 234, pages 5 and 6, can be furnished for No. 17, as attachments. If complete machine is wanted with Fig. 215, order by adding letter "B" to the number, as No. 17B. If wanted with Fig. 234, add letter "D," as No. 17D.

If drill only is wanted, order No. 18, which is Fig. 127 less the working tools. See also Fig. 428, on page 10.





76 YEARS IN BUSINESS

BATEMAN M'F'G CO., GRENLOCH, N. J.

nished if wanted.

or Fig. 127, but these can be fur-

IRON AGE No. 12 Wheel Plow and Cultivator

It has four working tools as shown in the engraving—it will plow in all but hard ground, open furrows and cover them; hill growing crops, hoe, rake, and cultivate.

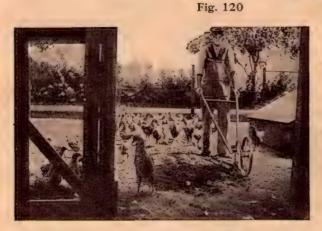
Price, Fig. 120, \$3.50

Packed weight, 20 lbs.

For the laborer and mechanic who cannot afford much money for a garden tool, who has time only for the simplest work, but who, nevertheless, wants a garden with the least work possible. It means a big reduction in living expense and better health for his family and himself. The No. 12 is low priced, but complete in itself for the work to be done. This tool, also, can be used to advantage in stirring the soil in poultry yards.

Easy to manage. The average net weight with one working tool is about eight pounds, and it is easily carried wherever you want to work. It is used as readily as a common hoe, but is quicker and does more good.

Scuffle hoes, like the one shown on the tool in Fig. 120, can be furnished in any width up to 12 inches. Has the steel 16-inch wheel and a steel tube arch attached to a malleable frame.



The chicks like this and they are healthier when induced to work



Plowing the whole garden with No. 11

No. 11 Wheel Plow

A light, graceful, low-priced tool, that can be used as a wheel plow anywhere, but is especially recommended for turning under accumulations in the poultry yard.

Scatter some oats and turn them under with the plow, so the chicks will have to scratch for the feed. The tool will pay for itself in this way alone, in the smallest poultry yards, and several tools can be used to advantage on a large poultry farm—the chicks will be healthier and more profitable.

Has bicycle construction, steel wheel (16-inch) and steel tube frame. It will plow from three to four inches deep, and throw a furrow four to six inches wide. Easy to push and perfect in its work.

For the poultryman, big and little—increases your profits with very little work.

Price, \$2.50
Packed weight, 15 lbs.

IRON AGE No. 19-C Wheel Cultivator and Plow

A good investment for any gardener, whether he be an amateur, an old-time home gardener or a market gardener, but is especially recommended to the man who has never tried any and wants a low-priced tool to begin with. He will always have use for it no matter what other combinations he may buy for seeding, etc.

It does the necessary plowing in many soils, opens furrows for seed or fertilizer and covers on the return trip. Has two sizes of single teeth that work between narrow rows, a scuffle hoe and set of three teeth on one bracket for hoeing and cultivating between the wider rows. The old way of hoeing is entirely out of date and unnecessary.

With a tool of this kind, the work is done in a tenth of the time and you go through ten times where you did once before—result, a better garden in every way, with less work—keeps the weeds

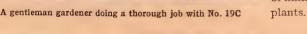
down, the thorough cultivation is good for the soil and helps to hold moisture in the ground.

The gardener in the cut does in two minutes with the No. 19C, work that would take a man a half hour with the old-fashioned hoe, and he does it far better, also.



24 inch wheel. The distinctive feature of this tool is its high steel wheel—24 inches—which some sections seem to prefer. The frame is an all steel arch in three parts—compact, light, durable. The working tools are attached in position easily and are adjustable. The plow turns a good furrow and is used for ridging or hilling the

Thousands of these tools are





No. 19 Wheel Plow and Cultivator

This is the old form of this tool and is furnished when ordered. No. 19 has a malleable rake in place of the set of three cultivator teeth on one bracket. The **Bracket with teeth** and set screw is sold as an attachment to fit old No. 19 (see Fig. 408).



Fig. 408 Price, \$1.00

IRON AGE "Gem" Single Wheel Garden Hoe

A thoroughly practical garden tool that has given entire satisfaction to many thousands of users. It has been on the market in all parts of the country for more than 30 years.

The "Gem" is largely built of steel and malleable iron—is light, compact, and has the necessary strength to make it durable.

All tools are fastened in notches on under side

of the frame—they will not get loose and slip when working, and are adjusted on the frame as needed.

Fig. 30

"Gem" Double Wheel Fig. 32. Price \$0.90

Having two wheels instead of one, this tool can be used astride the rows in first and second workings of the crop. Side hoes are furnished instead of scuffle hoes, for close work.

The axles are made to slide together like the parts of a telescope and bring the wheels close up, so that the tool can be used as a single wheel hoe, between the rows.

The frame is exactly the same as used on the Single Wheel "Gem" and has same adjustments for tools and height of wheels.

Takes Fig. 33, Onion Set Gatherer, shown on page 45.

The working tools include set of five slender cultivator teeth, each stamped from one piece of steel and guaranteed for thorough work, especially in hard soil—

frame braces up or

Price, Fig. 30, \$5.00

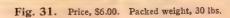
Packed weight, 25 lbs.

With five teeth only, \$3.75

two sizes of scuffle hoes for working between the rows and a pair of plows which can be used together as one plow or separate for hilling. The scuffle hoes are four, and eight and one-half inches wide. A special size, six inches wide, will be furnished when ordered.

The wheels are adjusted in height by moving

down on ratchet at front end of frame. The handles, also, can be adiusted to suit short or tall people. Fig. 32, Landside Plow, can be applied only to "Gem" Wheel Hoes, Single or Double, and is furnished as an attachment. Opens a straight, deep furrow.



A seed drill with 30 years' success behind it - popular with seedsmen and market gardeners. One old man (92 years) still has his 22 year old "Model" and values it above every other tool. It is still in use and has been every one of the 22

We have exact regulation of seed discharge by using an eccentric index or indicator which adjusts the slide for seed opening exactly where you want it.

years.

There is no series of holes which have to be used whether they answer or not. The index is in plain sight

when the tool is in operation—the names of the principal seeds are shown on it-no reference table is necessary. While we provide this marked index.

We suggest that each man adjust at the mark, a



Fig. 29

trifle ahead or to the rear of the mark, according to his preference for sowing-every man can suit himself, but he gets an exact adjustment which he cannot get elsewhere.

The flow of seed can be instantly stopped by a swinging cutoff, operated by a cord and ring on the

handles. Prevents loss at ends of rows and is preferable to a slide cut-off that is likely to be jammed by falling seed.



Other features. The marker is held firmly in place and is easily adjustable. The covering wheel is attached to a swinging frame and by varying pressure on the handles the operator can roll lightly or otherwise. The main wheel is high with wide rim that keeps it from sinking into soft earth.

Unless otherwise ordered, we furnish all these drills with regular steel

adjustable for depth. (See Fig. 320.) When wanted with opening plow, shown in Fig. 234, the complete tool should be ordered as No. 2 New Model. This plow is practically clog-proof. It is sold as

an attachment for any New Model Seed



Fig. 234 Price, \$0.50



Drill.

Fig. 304 Price, \$0.50

Our new No. A22 Opening Plow is used largely for sowing onion seed for sets. This plow will scatter seed in a row over three inches wide. (See Fig. 304.) If drill is wanted fitted this way, order "Equipped with A22 plow."

No. 8 Hill and Drill Seeder

Has capacity for the larger seeds and yet accurately hills and drills all of the smaller varieties. It is light and simply constructed, but strong enough to do its work. The wheel is steel, 15 inches high, with two-inch tire.

Has 4-quart hopper, revolving brush agitator and



Fig. 119 Price, \$0.50

force feed for seed, clog-proof opening plow, accurate hill dropping device (drops 4, 6, 8, 12 and 24 inches apart), flexible spring coverer, convenient shutoff, adjustable marker.

Fig. 119 shows special plow for sowing seed for onion sets-sows over three inches wide. Can be used on this tool only.



BATEMAN M'F'G CO., GRENLOCH, N. J., U. S. A.

IRON AGE No. 22 Combined Fertilizer Distributor, Hill and Drill Seeder

Fig. 398 No. 22 Drill attachment Price, \$5.00 Commission of the last of the

While commercial fertilizers are more convenient and more pleasant to handle than manure and are practically necessary in order that you may compete with your neighbor, they are not

profitable unless applied in an economical way.

The gardener must know not only what kinds of fertilizer to put on, but how.

There is where our No. 22 Iron Age comes in-it applies the fertilizer in connection with the seed just where it will do the most good, and without

injury to the seed. Although on a smaller scale,

The distributor is built on practically the same lines as the one used on our Planter, a complete description of which is shown on page 6. The flow

of fertilizer is regulated by a gate, adjusted by thumb screw, and is divided in the spout, at the discharge opening, into two streams. The brass wire distributing tubes are flexible to meet necessary adjustment of the plows. The tubes will not rust—other parts likely to rust are galvanized. Fertilizer hopper holds four quarts.

Fig. 130

The fertilizer distributor has

Two opening plows—one or both may be used, and they are adjustable for depth and width also—the fertilizer can be placed as near the seed as you wish or in the same line as the drill. Flexible coverers follow the plows.

The Hill and Drill Seeder attachment used on this tool is about the same as used on our Nos. 6 and 15 Com-



Fig. 132

bined — the only difference being construction changes necessary to attach and operate it on No. 22. It is a complete attachment with its own opening plow and flexible coverer-opens its own trench through the mixed fertilizer and soil, and deposits the seed, without injury, in hills at 4, 6, 8, 12, or 24 inches apart, or in continuous rows as wanted.

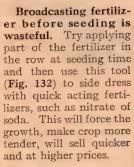


The wheels are steel, 16 inches high, light and strong.

Below we explain another use for this tool when set up, as

No. 23 Fertilizer Distributor

To be used as a Side Dresser. It is simply a part of No. 22without the Hill and Drill Seeder attachment and with small twowheel truck at the rear. The tool can be purchased complete in this form and the Hill and Drill Seeder attachment added if needed later.



Right forcing makes

more tender crop

prices

sells quicker, at higher

Cultivating tools can-not be applied on the frame of this machine



No. 22 in the field-spreading the fertilizer and drilling seed in one operation

IRON AGE No. 25 Single Wheel Fertilizer Distributor

A combination of our No. 20 Single Wheel Hoe Frame and a practical Fertilizer Distributor attachment, for the proper handling of commercial fertilizers. With it

> Fertilizer may be sown across the bottom of the furrow or on either side, so it will not come in contact with the seed, possibly injuring it. Or, you can use the tool

For side dressing of crops, forcing earlier maturity and making a more tender and salable crop. See V-shaped piece shown in spout in Fig. 184. When wanted on one side only, use small piece under sprocket to clog one side. If broad

stream is wanted, take out V-shaped piece. The tool is light and convenient to get around with.



inside the hopper that come in contact with the fertilizer are galvanized to prevent rusting. A revolving wheel feeds the fertilizer.

Buy the tool as a Distributor and purchase at any time the necessary working tools and all attachments, including the drill, to use the machine as a Single Wheel Hoe and Drill Seeder, or buy the Distributor attachment and apply to your No. 20 frame.

The capacity of the hopper is a little over four quarts. All castings Price, Fig. 237, No. 26 Fertilizer Drill \$8.50. Packed As No. 26 is often used weight, 40 lbs. desirable that a marked furrow be left as a guide so we furnish a marker wheel, as shown in Fig. 303. Order Nos. C154, Fig. 237

Fig. 303 Special marker wheel and frame, \$1.75

Fig. 184

No. 25 Fertilizer Distributor

Attachment. Price, \$4.50

C155. (Frame and Wheel.)

This tool is made by attaching No. 26 Fertilizer Drill to No. 20 Single

Wheel Hoe, and is sold as a complete tool, less the working tools, or as an attachment.

It drills the fertilizer and makes in advance of seed drill, it is its own furrow, covers and packs it, and marks the next row, all in one

operation. Sows fertilizer from 3/4 to 3 inches in depth. Is light draft and convenient to handle.

For small seed. It is used mostly for drilling about eight days in advance of small seed, such as onions, etc. It has our anti-clog plow, which cuts through and rides down trash and

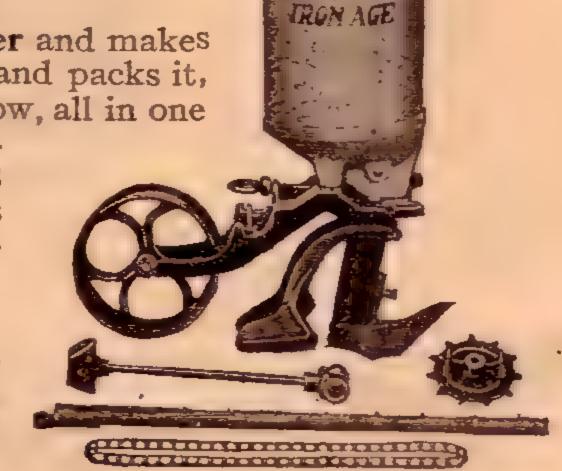


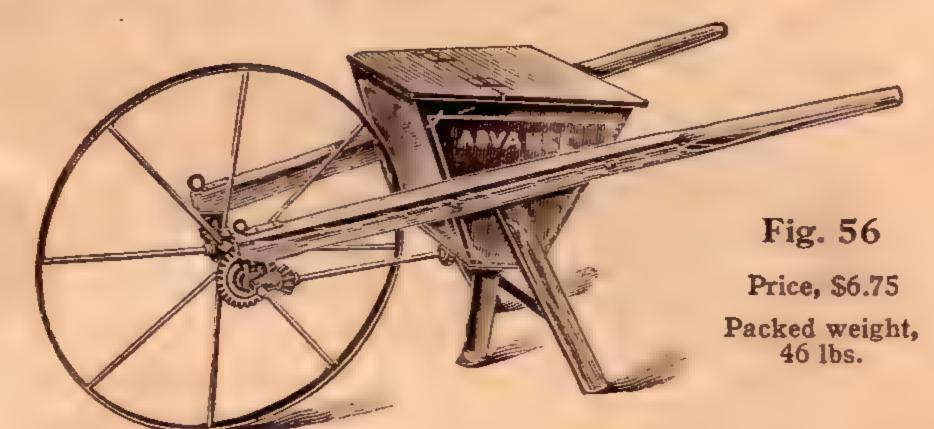
Fig. 235 No. 26 Fertilizer Drill attachment Price, \$5.00

lumps and helps to put the fertilizer just where it is needed.

Nos. 25 and 26 when sold as attachments can be applied to our No. 1 Double and Single Wheel Hoe, as well as to the No. 20.

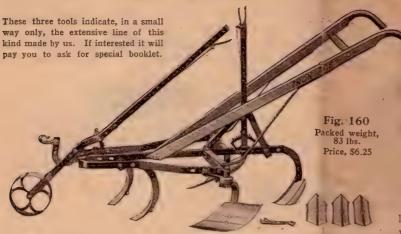
"Advance" Fertilizer and Seed Drill

The best low-priced distributor on the market. Also, a first class tool for drilling peas, beans and corn. The distributing disc is galvanized iron and will not break or rust. Hopper holds 18 quarts and is lined at the bottom with galvanized iron. A steel agitator keeps the seed moving, and a lever with thumb nut controls the seed opening. A loop is fastened at each side of the wheel so that a horse can be used—a small boy can operate it easily. The feed is operated by gearing and is positive. A lever throws in and out of gear. The wheel is steel-light, yet strong. We use a high wheel because it runs easier.



76 YEARŞ IN BUŞINESS

IRON AGE No. 6 Horse Hoe and Cultivator



struction, compact and convenient.

The expander lever changes the tool instantly, while in motion, to any width within range. Works smoothly—gives you control of the tool for changes in the same and other rows.

No. 1 Five Tooth Cultivator

A plain tool, built strong and simple, low-priced—just the one for straight-ahead work.

This tool is a complete machine with lever expander, lever wheel, and three extra points to make the machine into a five tooth cultivator. It is also furnished without either or both expander lever or lever wheels, or in any one of many combinations, with or without various attachments for special work.

Expands to 30 inches and closes to 14—as a cultivator, will close to 11. Can be set to hoe, ridge, cover, etc.—the standards are reversible and adjustable at different angles.

The long, high steel frame makes the tool run steady and clear of trash. Every tool in this line is light, yet strong

and rigid-all are very simple in con-

It can be made into a seven or nine tooth cultivaor, with or without lever expander and lever wheel—can be furnished as a horse hoe and also takes many special attachments.

A plain clamp expander adjusts the width from 9 inches to 24.

Fig. 10
Price, \$3.15
Packed weight, 50 lbs.
With plain wheel, add 50c
With lever expander,
add 75c
With lever wheel,
add \$1.00
With horse hoe and sweep,
add \$1.35

No. 1 Combined Harrow and Cultivator

A combination tool with high frame, clean cut construction and adaptation for many crops and two kinds of cultivation—as a harrow and as a cultivator.

A good tool in small fruits, sugar beets, etc. Opens to 34 inches and closes to 11. Furnished with or without expander lever—also, less the wheel. May be had with either

Combination harrow and cultivator teeth or with double end cultivator points. The regular teeth, as shown in Fig. 106, are adjustable for height and angle.



Fig. 106

76 YEARS IN BUSINESS

Price, Fig. 106, \$5.00 Packed weight, 66 lbs.

Price, plain harrow,

For plain wheel, add \$0.50

For lever wheel, add \$1.00

For lever expander, add \$0.75

No. 2, with

IRON AGE Barrel Truck, Cart, Leaf Rack, Etc.

No. 1—Without barrel, steel wheels, 1½ in. \$ 7.00 No. 2—Without barrel, steel wheels, 2½ in. 7.75 No. 3—Without barrel, steel wheels, 3½ in. 8.50 No. 1W—Without barrel, wood wheels, ½ in. 8.25 No. 2W—Without barrel, wood wheels, ½ in. 9.25 No. 2W—Without barrel, wood wheels, 2½ in. 9.25
No. 3W—Without barrel, wood wheels, 4 in
Prices include one pair trunnions. With barrel, add \$3.00



We are the original inventors of this style of Barrel Truck—there have been many imitations but none quite as good. Fig. 305 shows construction.

The barrel is picked up by the truck, carried to its place and dropped without your touching it.

The weight is balanced on the axle-none of it is carried on the handles-you just have to push the truck



steel braced and steel fitted throughout. The width of the truck is 39½ inches (outside). It has steel wheels with 21/2inch tires unless otherwise ordered. We can furnish with 1½-inch or 3½inch steel, or 1½, 2½ or 4-inch wood wheels. The barrel is well made. The truck will handle other barrels-spirit or oil barrels, for instance-if extra trunnions (price, per pair, \$.40) are used.

along. There are no castings to break-

Fig. 350. The solid part shows barrel stay rod attachment. It keeps barrel from tip-

ping and contents splashing, when truck is in motion. Is furnished only when ordered. Will fit old trucks. When wanted with truck. add letter "S" to the number, as No. 2S.

Fig. 351. The solid part shows portion of combination side irons and truss rod. This attachment is to keep wheels from spreading at top after long continued carrying of heavy loads. It is to guard against rough usage only, but does add strength to



Fig. 351 Solid part shows portion of side irons and truss. Price, attachment only, \$3.50

truck. Is furnished as an attachment. If wanted with truck, add letter "T" to the number, as No. 2T. Add \$1.00 to above prices.

Other uses for this truck, shown below, add to its value many times. With the entire outfit, a man can do

so many kinds of work that he gets his money back in short order. There is scarcely a week when some part of the outfit isn't in demand.

Hand cart



Fig. 306

box only. Fig. Size 37 x

231/2 x 8 inches deep. Includes axle and spring catch. Tail board lifts out in the usual way. Requires no

bolts to attachsimply lay it on the truck.



Fig. 307 Arrows show spring catch, axle, tail board connections. Price, leaf rack only, \$5.50

Leaf rack only. Fig. 307. For taking care of leaves, grass and trash on the lawn, in the garden, and may be used handily about the barn when you are cleaning up. Shipped knocked

down, and can be folded flat and put away in small space.

Arrows show tail board fittings, axle and spring catch to hold it at the back. Size, 42 x 28 x 21 inches deep. Is light weight, but well put together. Attaches by simply laying it on the truck.

The sprinkler attachment, Fig. 308, is used for watering lawns and walks, a great convenience for home, parks, railroad stations, cemeteries, etc. It consists of perforated steel pipe and fittings. A ball valve on the right side controls the water.



76 YEARS IN BUSINESS

IRON AGE Small Tools for Farm and Garden

Fig. 44

No. 1, 5½ in., \$11.50 doz. No. 2, 6½ in., 12.50 doz. No. 3, 8 in., 13.50 doz.

"Bateman" Hoe. Fig. 44. A grubbing or digging hoe—for cutting corn stubble, trimming along the fences, digging out roots, digging potatoes in the garden, etc. Is light but strong, has beveled edges and is oil tempered. Every farm should have one.



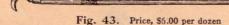
adjusts the working depth. The most manageable tool of the kind on the market.

Eureka Corn Knife. Fig. 42. A corn cutter made from a solid piece of steel, oil hardened and temper drawn in a hot lead bath. Has wood handle. You will not be without one or more of these tools when you have used one an hour. See if we are not right.

Transplanting Trowel. Fig. 40. For small plants. Used by truckers in sweet potatoes, cabbage, cauliflower, etc. One piece of steel with wood handle. Don't forget that to properly transplant, the holes should all be the same depth and the plants supported against a slanting side of the hole. Then close up the soil around the roots.



Transplanting Hoe. Fig. 41. For transplanting long stem tomato plants and others. Jab the hoe into the soil, pull it toward you, lay the plant against the slanting side and push the dirt tight around the roots.



Vine Cutter. Fig. 43. For cutting sweet potato vines, etc Saves the back.



Fig. 168. Price, \$3.50 per dozen

Dandelion Puller. Fig. 168. A handy tool with which to keep your lawn cleaned up.

"Bateman" Hand Garden Plow.
Fig. 39. For opening furrows for seed and manure, for covering and for tending the crop. Is a neat, carefully made tool with highly polished steel moldboard and side handle (don't have to pull overhand). A thumb nut

Fig. 39.
Price, \$13.00 per doz.



No. 1 Asparagus Knife. Fig. 45. For those who want the flat kind.



Fig. 45. No 1. Price, \$3.00 per dozen

No. 2 Asparagus Knife. Fig. 260. Some prefer to use a concave knife—they think it takes hold better. Such a tool is a necessity for large or small growers—the crop will be gathered in better shape, and time saved is just as good as money in the bank.



Fig. 260. No. 2. Price, \$4.00 per dozen



Fig. 399. No. 3. Price, \$3.00 per dozen

No. 3, a "fishtail" style, 10-inch blade, drop forged, well ground, enameled shank, securely fastened to wood handle. Although especially designed for cutting asparagus, it can be used effectively for cutting out weeds on the lawn, or for any weeding or stirring of the ground.



Fig. 128
Garden Dibble
Price, \$3.25

76 YEARS IN BUSINESS

IRON AGE Horticultural Row Index

It may seem foolish, or at least needless, to spend money for things of this kind—a stick and piece of paper may answer the purpose, but certainly will not be as durable nor look so trim as this Row Index.

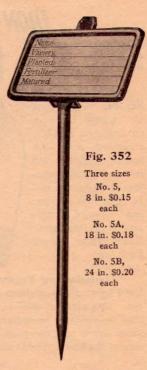


For use in private gardens, on trial grounds, experimental plots, in greenhouses, parks, etc.

Shows what you planted, and where and when. The labels can be taken out and filed for future reference. They are protected against the weather, dirt, etc., by transparent celluloid sheets. The label holder and frame are stamped from two pieces of steel, and the flat end of the steel standard goes through a double slit in holder on the

back to keep label in the frame. Holder and frame are japanned to preventrust.

The card label is a printed form, size $2\frac{5}{8} \times 1\frac{3}{4}$ inches. Extra labels furnished when needed.



The standards are made in three lengths as shown in list. Home gardeners, seed men, and professional horticulturists find such an index of great value and convenience in their business.

Harness Brackets

If the lack of a thing is, to you, the plain reason for the loss of chunks of money, you are not long in getting that particular thing. Why not apply the same remedy to the little things that mean considerable when taken together—that mean

Your convenience

A saving in wear

A lasting influence for your men

Order and neatness that is pleasure to see.

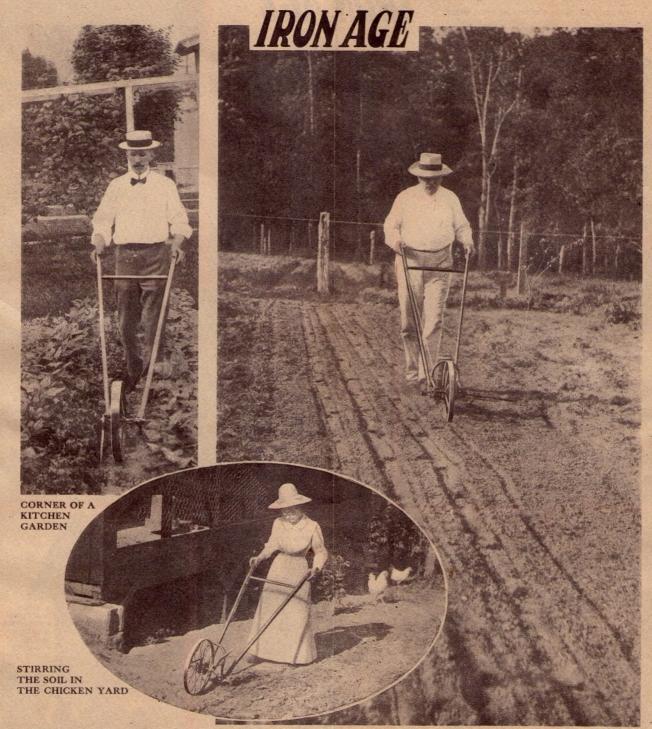
Every farmer, every livery, every private stable should have a set of these brackets. They will keep your harness in shape, which won't be the case if you hang the parts on old-fashioned hooks or nails, or throw it in the corner—somewhere. These brackets will teach your men and boys order—that there is "a place for everything" and every thing should be in its place.

Instead of one hook, from which you have to pick each separate part of your harness, you will have these four brackets. If one part is missing, you can see it at a glance, and know which part it is.

The brackets are made of grey iron, painted black and furnished with the necessary screws for fastening. The four

Fig. 353
Price, 4 brackets, \$1.00

fastening. The four parts are for the saddle, collar, crupper and bridle.



BATEMAN M'F'G CO., GRENLOCH, NEW JERSEY, U. S. A.

AN ALABAMA MAN MAKING GARDEN IN NEW GROUND

IRON AGE NO. 1 2N A BIG PATCH OF ONIGINS DI OKLAHOMA. THE SMALL BOX CAN LIGHTS PART AT ONE TIME NO 12 HAS DOOR A WONDERFUL LIST OF WINE IN THE BOME WARTEN WITH STRIKE CASBAGE IN ARKANIAS "ADVANCE" PERTRAPER TRAIL A FRUIT EASTINEY EMPLOYES EASTINEY MANUEL PORTER

THE OF Acres